



United States Department of the Interior

Office of the Secretary
Office of Environmental Policy and Compliance
Pacific Southwest Region
333 Bush Street, Suite 515
San Francisco, CA 94104

IN REPLY REFER:
(ER 14/0250)

Filed Electronically

1 July 2014

Joint Guam Program Office Forward
ATTN Commander Curtis Duncan
P.O. Box 153246
Santa Rita, Guam 96915

Subject: Review of the Draft Supplemental Environmental Impact Statement/Overseas Environmental Impact Statement (DSEIS/OEIS) for the Guam and Commonwealth of the Northern Mariana Islands Military Relocation (2012 Roadmap Adjustments), GU, and CNMI

Dear Commander Curtis Duncan,

The Department of the Interior has received and reviewed the subject document and has the following comments to offer for your consideration:

U.S. Fish and Wildlife Service

The USFWS comments incorporate input from our National Wildlife Refuge System, Migratory Bird, and Ecological Services programs. As described in our comments, the Service has significant concerns regarding the implementation of the DSEIS preferred alternative related to the Service's mission, and the Guam National Wildlife Refuge's purposes and compatibility.

The Guam National Wildlife Refuge (Guam NWR, Refuge) was established in 1993 in response to the 1984 listing of six species as endangered pursuant to the Endangered Species Act of 1973 (ESA). The refuge is comprised of three units: the Andersen Air Force Base Overlay Refuge Unit, the Navy Overlay Refuge Unit, and the Ritidian Unit. The Ritidian Unit is comprised of 1,217 acres, including near-shore habitat, owned in fee by the U.S. and administered by the Service.

The other two units of Guam NWR total approximately 22,456 acres, and are overlays on property managed by the Department of Defense as part of Air Force and Navy installations.

The Guam NWR was primarily established to protect and recover nine species listed under the Endangered Species Act and endemic to the Mariana Archipelago, including the Guam Micronesian kingfisher (*Halcyon cinnamominacinnamomina*), Guam rail (*Gallirallusowstoni*), Mariana crow (*Corvuskubaryi*), Mariana fruit bat (*Pteropusmariannusmariannus*), Mariana

grayswiftlet (*Aerodramusvanikorensisbartschi*), Mariana common moorhen (*Gallinulachloropusguami*), two species of sea turtles, and a tree known as the hayunlagu (*Serianthesnelsonii*). The 385-acre terrestrial portion of the Ritidian Unit is designated as Critical Habitat under the Endangered Species Act for the Guam rail, Mariana crow, and Mariana fruit bat.

In the Joint Guam Program Office's 2014 Draft Supplemental Environmental Impact Statement for the Guam and Commonwealth of the Northern Mariana Islands Military Relocation (2012 Roadmap Adjustments) (dSEIS) the U.S. Department of Navy (DON) has identified Northwest Field at Andersen Air Force Base (AAFB) as the Preferred Alternative (Alternative 5) for the proposed Live-Fire Training Range Complex (LFTRC) on Guam. The Service remains concerned that the continued inclusion of the Northwest Field Alternative (Alternative 5) for the Life Fire Training Range Complex (LFTRC) as the preferred alternative will have have substantial natural resource impacts, including access, management and operational needs.

This includes the establishment of a surface danger zone (SDZ) over a portion of the Ritidian Unit of the Guam NWR to support the operation of a live-fire training range complex on AAFB. The Northwest Field LFTRC preferred alternative includes reassigning custody and control of a large portion of the terrestrial and marine portions of the Ritidian Unit, which falls within a proposed SDZ, from the Department of the Interior to DON. This proposed site, on the plateau above the Ritidian Unit of Guam NWR, is part of the Air Force Overlay Unit, as is approximately 500 acres of the 832-acre submerged portion of the fee title Refuge that would also fall within the SDZ.

The U.S. Fish and Wildlife Service (Service) has significant concerns regarding the implementation of the dSEIS preferred alternative related to the Service's mission, and the Refuge's purposes and compatibility. The following comments are focused on the Ritidian Unit which is located on the northern tip of Guam and encompasses 385 terrestrial acres and 832 offshore submerged acres.

The Ritidian Unit operations and availability are the primary FWS resources that will impacted, potentially compromising the wildlife heritage of Guam, the recovery and conservation of at-risk and federal-listed species, recreational opportunities for residents and tourists, and invasive species management. This document incorporates input from the Service's National Wildlife Refuge System, Migratory Bird, and Ecological Services programs.

General Concerns

The Refuge's Overlay units were established by cooperative agreements between the Service and DON and U.S. Air Force in 1994 in part to help conserve the Mariana crow or "å'ga," the Guam Micronesian kingfisher or "sihek," and the Mariana fruit bat or "fanihi." At the time the Guam NWR was established, 12 other species of birds and the little Mariana fruit bat (*Pteropustokudae*) had already been extirpated from Guam due to predation by the non-native, highly invasive brown tree snake (*Boigairregularis*). The Refuge contains the last remaining native habitat available for the reintroduction of the Guam rail. In 2004, the Service designated the 385 terrestrial acres of the Ritidian Unit as critical habitat for these species. This is the only designated critical habitat on Guam for these species.

Approximately 255 acres of GSNWR Overlay lands will be negatively impacted by construction of the LFTRC described in Alternative 5. In addition to being GSNWR Overlay, this area includes lands that have been designated for ungulate exclusion and forest enhancement mitigation as well as under the Intelligence, Surveillance, Reconnaissance and Strike Capability Biological Opinion in 2007 and (2) subsequently proposed as an Ecological Reserve Area in the original Joint Guam Program Office (JGPO1) Biological Opinion in 2010. Any future mitigation for these Overlay lands must address both the loss of the current mitigation role these lands play, in addition to any habitat loss resulting from the implementation of the preferred alternative.

The Service has the statutory authority and responsibility for enforcing the Migratory Bird Treaty Act (MBTA) and is the lead Federal agency for managing and conserving migratory birds in the U.S. and its territories. The Refuge has identified seabirds, migratory waterfowl, waterbirds, and shorebirds as priorities/conservation targets that the Refuge will actively manage to conserve and restore. One of four purposes for establishment of the Ritidian Unit of the Refuge is "...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds," and protecting nesting seabird habitat is a major objective of the Refuge and is consistent with the provisions of MBTA.

The preferred alternative poses impacts to our ability to protect and manage for the many seabirds, such as the white-tailed tropicbird (*Phaethon lepturus*), brown booby (*Sula leucogaster*), wedge-tailed shearwater (*Puffinus pacificus*), brown noddy (*Anous stolidus*), white tern (*Gygis alba*), yellow bittern (*Ixobrychus sinensis*), Pacific reef-heron (*Egretta sacra*), and others covered under the MBTA.

The Refuge also provides nesting habitat for threatened green turtles (*Chelonia mydas*), foraging habitat for endangered hawksbill turtles (*Eretmochelys imbricata*), and some of the only protected coral reef surrounding Guam. There are five species of coral (*Pocilloporadanae*, *Pocilloporaelegans*, *Montiporacaliculata*, *Montiporalobulata*, and *Milleporatuberosa*) within the marine portion of the Refuge that are proposed by the National Marine Fisheries Service as threatened under the ESA.

The preferred alternative also includes approximately 500 acres of limestone forest and is the site of the last remaining wild mature hayunlagu tree on Guam and approximately eight of its saplings.

The SDZ would cover approximately 63% (242 acres) of the terrestrial portion of the Ritidian Unit, all of which is designated critical habitat. For approximately 39 weeks/year, the SDZ would require a major portion of the Ritidian Unit to be closed to all persons during all live-fire training, including the access road leading to the remaining Ritidian Unit lands. Consequently, all access to the Ritidian Unit to carry out recovery actions and endangered species monitoring would be impeded from 7:00 a.m. to 3:00 p.m. Monday through Friday, for approximately 75% of the year.

Under the dSEIS, the preferred alternative would also limit the Service's access and ability to effectively suppress the brown tree snake on the Ritidian Unit. Refuge habitat would also be subject to elevated noise levels from the LFTRC throughout most of the year, further negatively

affecting resident wildlife and visitors, and reducing the likelihood of success of potential reintroduction of special status species.

This closure is likely to compromise recovery, research, monitoring, and public education actions at the Refuge. The Service believes that implementation of the preferred alternative would directly and indirectly preclude the Service from carrying out its mission and the purposes for which the Refuge units were established.

The Service does not consider the proposed mitigation sufficient to alleviate impacts to critical habitat and to current and planned recovery actions on the Ritidian Unit. The area would not remain functional to serve its intended conservation role for listed and at-risk species if this alternative is implemented.

Specific Concerns

Hayunlagu is only found on Guam and Rota. Currently, all the trees on Guam but four young saplings lie within the proposed SDZ. There is one mature tree and approximately eight saplings on Northwest Field at AAFB within the proposed SDZ, 17 saplings at Ritidian Point within the SDZ, three to four young trees near Jinapsen Beach on AAFB, and 60 to 80 trees on Rota. This tree was federally-listed as endangered on February 18, 1987; it also is listed as endangered on the Red Data List for Plants, the Commonwealth of the Northern Mariana Islands Endangered Species List, and the Guam Endangered Species List.

Hayunlagu recovery actions would be restricted by limiting access to the last remaining adult tree on Guam, which is within the impacted area of the SDZ. This tree is the single source on Guam for seeds for propagation, and it is an important site for the research of threats to and survival of hayunlagu seedlings and the adult tree in the wild. Construction of the firing range will require the removal of native forest on the Air Force Overlay Refuge, resulting in a direct loss of habitat for this species. In addition, we are concerned about potential indirect effects to and the possible resulting loss of high-quality hayunlagu recovery habitat due to increased fire risk from training range operation and changes to wind regime associated with clearing large areas of forest in the vicinity of the tree (e.g., increased wind loading during typhoons).

Since 2008, the Refuge has held a permit to collect hayunlagu seeds and outplant seedlings. The Refuge monitors 17 outplanted hayunlagu weekly, in addition to raising seedlings in a nursery located on the Ritidian Unit. Access to the outplantings and the nursery is located within the proposed SDZ. Collaborative recovery actions for hayunlagu would be impeded if partners are unable to implement expansion of the Refuge's nursery, construct and repair ungulate exclosures, and propagate, outplant, and maintain hayunlagu seedlings on the Refuge. Consequently, recovery of the species may be impacted by the implementation of the preferred alternative.

Currently, the Mariana fruit bat population on Guam is estimated at less than 50 individuals. Mariana fruit bats are known to use this area for foraging and roosting. Construction under the preferred alternative would remove habitat used by this species, and noise disturbances from the operation of the LFTRC would also negatively impact the bats. The Refuge also houses seven captive fruit bats that are kept for outreach and education purposes. The Service requires

around-the-clock access to the fruit bats in order to provide the level of care needed to ensure their well-being. In addition, the Service has monitoring stations to conduct surveys, all of which are located within the proposed SDZ.

Relocation of the survey stations will require the modification of survey protocols and thus may jeopardize the long-term population studies currently being conducted. The Service recommends that the DON more clearly describe proposed avoidance and mitigation related to Mariana fruit bats in the Final SEIS as recovery of the species may be impacted by the implementation of the preferred alternative.

Two species of marine turtles are common in Guam's waters, the green turtle and the hawksbill turtle. Beach monitoring for nesting turtle tracks has been conducted since 2003 and on a daily basis by Refuge staff since October 2011, along 3 kilometers of the beach at the Refuge. Approximately 1.5 kilometers of the turtle monitoring area is located within the proposed SDZ, which will restrict access to, and management of, several of Guam's most active marine turtle nesting beaches.

Successful management of these species requires critical, timely actions, such as protecting nests from predators, which would be restricted during the SDZ closure periods. The dSEIS also does not adequately address the potential noise and lighting impacts, especially night-time noise, for nesting endangered marine turtles. Night disturbances can increase the amount of "false crawls" and additional ambient lighting can disorient hatchlings. The Service recommends the Final SEIS analyze the impacts to marine turtle management, which relies on accurate inventories and nest protection of these federally-protected species. Furthermore, we recommend that Final SEIS propose solutions to ensure management activities continue.

The Refuge has recently constructed a multi-species barrier around a 125-acre area of the Refuge to aid in recovery of listed species by suppressing invasive vertebrate predators and herbivores. The primary goal of the multi-species barrier project is to allow for the reintroduction of native birds and native forest regeneration. The Refuge is actively removing and controlling invasive species within the fenced area, including feral pigs (*Sus scrofa*), Philippine deer (*Cervus mariannus*), feral house cats (*Felis catus*), and brown tree snakes. Once the target species are controlled, the Refuge will initiate a soft release of endangered Guam rails within the enclosed area and the reintroduction of other birds now extirpated on Guam will follow.

Candidate species of tree snail (*Partularia diolata*) and butterfly (*Hypolimnas octoculata mariannensis*) and butterfly host plants are found on the Ritidian Unit. These species and their hosts face significant threats from ungulates. Without maintenance of the multi-species barrier and adequate protection from ungulate eradication, these species' conservation will be at risk. The Service recommends that the Final SEIS propose solutions to ensure species' conservation actions and monitoring are implemented.

Overall, the dSEIS provides limited detail on specific biosecurity and brown treesnake interdiction measures. The Service appreciates the DON discussion of Hazard Analysis and Critical Control Points to ensure invasive species risk is reduced relative to construction activities. However, the Service believes that additional detail, beyond that presented in Table 2.8-1, is needed about brown treesnake and biosecurity best management practices to determine

the adequacy of proposed measures. In particular, specific detail is needed on measures the DON will take to prevent the spread of brown treesnake, coconut rhinoceros beetle (*Oryctes rhinoceros*), and little fire ant (*Wasmannia auropunctata*).

The preferred alternative would limit our access and ability to effectively suppress the brown treesnake, as a portion of this fenced area is located within the proposed SDZ. The placement of the SDZ and closure of this area would limit necessary maintenance of the barrier and set back collaborative efforts between the Refuge and U.S. Geological Survey's Brown Treesnake Research Group to implement and research snake suppression. It would also increase noise and other disturbances from the SDZ, which would reduce the success of future reintroductions of special status species.

Waters near the Ritidian Unit support resident seabirds including the white-tailed tropicbird red-tailed tropicbird (*Phaethon rubricauda*), brown, masked booby (*Sula dactylatra*), and wedge-tailed shearwater. At least an additional 28 species of waterbirds, waterfowl, and shorebirds use open fields, shorelines, and other regions of the refuge during winter or migration. The occurrence of nesting seabirds (e.g., cliff-nesting species such as brown noddies, white tern, white-tailed tropicbird, and wedge-tailed shearwater) has declined due to predation by introduced species, but nesting habitat for these species remains. Two resident breeding waterbirds that are documented in forest edge and exposed coral reef regions on the Ritidian Unit are yellow bittern and the endemic Pacific reef-heron.

The preferred alternative would limit our access and ability to effectively protect resident and migratory seabirds, shorebirds, waterfowl, and waterbirds, as well as increase the exposure to lead from spent munitions and noise disturbance.

There is potential for lead poisoning through direct ingestion of spent lead shot, bullets, or fragments. The dSEIS addresses potential concerns regarding lead contamination of water supplies, but does not address the potential for lead poisoning in wildlife on the Ritidian Unit. Poisoning of birds by lead shot has been a recognized problem for more than 100 years. The most significant hazard to wildlife is through direct ingestion of spent lead shot and bullets, or through consumption of wounded or dead prey containing lead shot, bullets, or fragments.

The dSEIS describes best management practices for managing lead at the LFTRC including containing and limiting the spread of the spent munitions. However, the dSEIS states that there is a potential for some amount of residual lead from spent munitions. We are concerned this will create a lead poisoning hazard for wildlife, especially for shorebirds such as Pacific golden-plover (*Pluvialis fulva*), which are attracted to short-grass and bare ground areas that will be created in construction of the LFTRC.

The creation of this habitat likely increases exposure to lead from spent munitions. We recommend the final SEIS contain a commitment to frequently removing lead from these and other areas where wildlife are likely to be exposed to lead through ingestion.

Noise impacts from the implementation of the preferred alternative remain a concern. The dSEIS states "Qualitatively, none of the noise-generating activities would create incompatible land use impacts and adversely affect individual human populations." However, noise impacts to wildlife

are not addressed in the dSEIS and noise is a significant environmental stressor. Noise impacts can be expected to occur from aircraft overflights and from live-fire operations.

While much of the research on the impacts of noise on animals has been conducted in laboratory settings, more recent research documents negative impacts of noise on wild bird populations. Avian species are more susceptible to negative impacts from noise than mammals, and juveniles may be more impacted than adults because of juveniles' high energy demands, thus any additional disturbance from noise may disproportionately impact juveniles. While birds may recover from isolated or infrequent noise occurrences, chronic noise has been shown to be detrimental at the population level, and impulsive noise can be more damaging than steady noise. Operation of the preferred alternative as proposed will likely result in chronic, impulsive noise levels. We believe this will have a significant adverse impact on birds and Marianas fruit bats and recovery of the species may be impacted by the implementation of the preferred alternative.

The dSEIS preferred alternative also includes the selection of Finegayan (Alternative A) for the main cantonment facility/family housing. As also noted in the Service's 2012 response to the dSEIS Notice of Intent, impacts to the Refuge lands and habitat for listed and candidate species would result from the construction and operation of the main cantonment facility at Finegayan. This alternative would directly impact 1,249 acres of Overlay Refuge lands, and the proximity of the cantonment facility to the biologically-sensitive areas in the Haputo Ecological Reserve Area (ERA) would likely have negative impacts to multiple rare species, including listed and candidate species. The Service recommends that more consideration be given to the Barrigada (Alternative D) cantonment/family housing preferred alternative because of fewer impacts to the Service's trust resources.

A number of mitigation measures for this alternative are proposed in the dSEIS including restricting access to the Haputo Beach area and requesting additional ERAs on Department of Defense property, among others. However, the Service is concerned that the proposed mitigation would not compensate for the loss of habitat and ecological function of the areas to be cleared.

Public Use and Environmental Education

The Ritidian Unit provides wildlife-dependent recreational opportunities for approximately 90,000 visitors annually who enjoy hiking, fishing, snorkeling, scuba diving, wildlife observation, and nature photography on the Refuge. The Ritidian Unit may be the most important resource for environmental education in Guam. Free environmental education presentations are provided to students from across the Island. Between 1998 and 2012, a total of nearly 97,000 students from 27 elementary schools and eight middle schools visited the Refuge on educational daytime field trips. These trips included visits to the Refuge's Nature Center and hikes on the Nature Trail and to the ancient latte site and caves.

Since 2003, a total of 30,530 students from all five of Guam's public high schools and 4,025 private school students visited the Refuge for cultural and environmental education field trips, while 18,900 University of Guam and Guam Community College students visited for similar field trips or volunteer-related projects.

In 1997, the U.S. Congress passed the National Wildlife Refuge System Improvement Act of 1997 (Pub. Law 105-57), which states “The [National Wildlife Refuge] System was created to conserve fish, wildlife, and plants and their habitats and this conservation mission has been facilitated by providing Americans opportunities to participate in compatible wildlife-dependent recreation, including fishing and hunting, on System lands and to better appreciate the value of and need for fish and wildlife conservation.” The proposed SDZ operations, closure schedule, and associated access limitations would prevent the Refuge from accomplishing this conservation mission and providing the public education and access to the Ritidian Unit.

Cultural and Archeological Resources

The Refuge’s cultural and archaeological resources are extensive, and their importance and concentration at the Ritidian Unit is unsurpassed island-wide. Areas of cultural significance include:

- Guam’s oldest-known and longest-occupied ancient Chamorro settlement site, the oldest archeological site in all of remote Oceania. The site was occupied from the time of initial arrival by Austronesian-speaking people nearly 3,500 years ago, to relocation by the Spanish in 1684.
- Location of at least six caves, three of which contain the island’s oldest-known pictographs that date back to 1,000+ years.
- Spanish-era settlement sites including Casa Real, a Jesuit settlement from the late 1600s, were occupied concurrently with the West Latte village site. An additional Spanish stone-lined well also occurs on the Ritidian Unit.

These historic archeological sites are currently being protected on the Refuge. Refuge staff members provide cultural and environmental education and interpretation to tens of thousands of visitors each year. These opportunities and programs will be unavailable to the public if the proposed preferred alternative becomes operational as outlined on maps provided in the dSEIS. In addition, ongoing research is being conducted on the eastern portion of the Refuge as many cultural sites have not yet been surveyed. These areas are all located within the proposed SDZ. Best management practices are not included for cultural resources; however, the dSEIS states that excavation and soil removal associated with construction of the preferred alternative could adversely affect 20 known historic properties, including pre-contact artifact scatters and sites containing latte components.

The closure of the Ritidian Unit would necessitate the relocation of the Visitor’s Center, other buildings and the establishment of a new access road to the 27% of Refuge lands that would remain open to the public. Cost estimates for relocating Refuge facilities (e.g., office, shop, Nature Center, bat cage, brown tree snake research facilities, etc.) from inside to outside the SDZ, range from \$10 to \$21 million. Some clearing of designated critical habitat may be required to facilitate a relocation of Refuge facilities. The cost of providing an alternative access road to the beach and other important recreation areas has not been estimated, but would require clearing of designated critical habitat which would also require mitigation. These impacts have not been adequately addressed in the dSEIS.

Mitigation Considerations

The Service recommends that the Final SEIS contain clear links between the value of habitat to be impacted, impacts from construction and operations, and proposed mitigation. The dSEIS includes numerous references to proposed mitigation measures meant to reduce impacts to resources; however, many of the proposed mitigation measures lack assurance or specificity. The dSEIS contains language about what DON “may propose” for mitigation to serious impacts without any guarantee of implementation should these impacts occur.

- Forest enhancement on a “minimum of” roughly matching acreage of forest cleared is proposed throughout the dSEIS as mitigation for multiple impact scenarios. Forest enhancement projects may or may not serve as commensurate mitigation on a strict “acre-for-acre” clearing-to-enhancement ratio. Other factors, such as the biological value of the habitat to be cleared, in addition to the potential value of enhancement measures must also be considered. That is, lost habitat must be replaced with habitat of equal or greater value.
- Many of the proposed mitigation measures are proposals to designate or expand DON ERAs, but language in the dSEIS indicates that the proposal alone, not the approval or implementation of these measures, will serve as the necessary mitigation. For example, under Alternative A for cantonment facilities, it states that “To mitigate for significant impacts to terrestrial conservation areas, the DON would submit a proposal to CNO Energy and Environmental Readiness Division to designate an ERA on the NAVMAG...” Mitigation for significant impacts should be the implementation, not the proposal of such measures. Designation of ERAs, or other mitigation, should be made as part of the Final SEIS. Importantly, areas within the Overlay Refuge lands should already be treated as ERAs; therefore, designating existing Overlay Refuge as ERA does not mitigate for lost habitat values elsewhere.
- After describing major impacts to wetlands under Alternative 3 for the LFTRC, the dSEIS states that “The DON may implement wetland restoration in accordance with the recommendations provided in the 2014 Wetland Restoration Feasibility Study.” The Service does not see a clear commitment to mitigating impacts to Mariana common moorhen, a listed species, even though Alternative 3 will “...directly impact and remove two wetlands that are known to be used by approximately 2-4 moorhens.”

The dSEIS states: “The proposed action must be compatible with the mission of the System and the purpose of the Refuge.” The preferred alternative would inhibit the Refuge staff from successfully implementing the recovery of nine endangered species (Guam Micronesian kingfisher, Guam rail, Mariana crow, Mariana fruit bat, Mariana gray swiftlet, Mariana common moorhen, green turtle, hawksbill turtle, and hayunlagu) by restricting the Service’s ability to reintroduce extirpated endangered species and to perform routine maintenance needed for the perpetuation of the aforementioned species.

The Service believes that implementation of the dSEIS preferred alternative would directly and indirectly preclude the Service from carrying out its mission and the purposes for which the Guam NWR was established due to the significant adverse impacts to the ongoing operation of the Refuge and the protection of trust resources the Service manages on this site. These operations were funded at \$835K in Fiscal Year 2014. If current Refuge Overlay lands are to be

used in ways that are incompatible with their Refuge Overlay status, those lands may have to be taken out of Overlay Status.

Mitigation actions would need to offset these impacts; it is unclear if that would be accomplished by the proposed mitigation. Service policy prohibits the use of compensatory mitigation to make an otherwise incompatible use compatible. The designation of additional fee title lands may need to be considered in light of the substantial loss of essential endangered species habitat.

In conclusion, the above comments reflect the concerns the Service has regarding the implementation of the preferred alternative as described in the dSEIS. Many of these comments reflect earlier comments submitted during the 2012 Notice of Intent process conducted by the DON. Thank you for the opportunity to review this proposed project. Please contact Miel Corbett, at (503) 231-2111 or Miel_Corbett@fws.gov if you have any questions.

National Park Service

The NPS manages two park units in the Marianas: War in the Pacific National Historical Park on Guam, the only site in the National Park System that honors the bravery and sacrifices of all those who participated in the Pacific Theater of World War II; and American Memorial Park on Saipan, which honors the American and Marianas people who gave their lives during the Marianas Campaign of World War II.

In addition to their cultural and historic significance, these sites preserve the most diverse coral reef system within the National Park System, habitat for threatened sea turtles, and the only federally managed wetland on Saipan. The NPS also represents the Secretary of the Interior for the National Natural Landmarks program and the National Historic Landmarks program, and is charged by the Secretary with administration of the Micronesian Historic Preservation Program.

For a full explanation of the NPS mission and responsibilities on Guam, please refer to our comments dated February 20, 2012, concerning ER-09/1197: Guam and Commonwealth of the Northern Mariana Islands Military Relocation.

The NPS believes that the potential indirect effects of the proposed actions will have significant adverse effects that could directly impact cultural and natural resources on Guam. There is limited analysis about the effects of the actions on natural, cultural, and historic resources by the proposed actions, particularly the cumulative impacts with other proposed large-scale undertakings by the Department of Defense in the Mariana Islands.

The NPS is concerned that the preferred alternative proposes locating a Live Fire Training Range Complex (LFTRC) above the Guam National Wildlife Refuge. Access to a large portion of the refuge will be restricted most of the year due to its location within the surface danger zone (SDZ) of the firing range. This will have significant, direct, adverse impacts on all aspects of refuge operations.

The refuge contains one of the earliest known archaeological sites in the Mariana Islands, nearly 3500 years old. In addition, there are several megalithic latte sites, and the terrain surface is covered by varying densities of artifacts and middens of the latte period dating potentially as

early as A.D. 900-1000 up to the Spanish colonial contact era of the late 1600s. The caves contain some of the oldest pictographs on Guam, including identifiable stellar pattern depictions in the drawings on rock surfaces. “The 3500-year record in the Marianas enables deep examination of landscape ecology and evolution, so far not possible in other remote Oceanic islands...” (Carson, 2012 as cited in SEIS).

Restricting access to these sites, which are eligible for listing on the National Register of Historic Places (NRHP), would severely limit further study and beneficial use of these resources by traditional healers, herbalists, and artisans along with other scientists.

The green sea turtle nesting sites and fruit bat foraging site in the proposed surface danger zone are some of the most important on Guam for these species so deeply entwined in Chamorro traditions. The U. S. Geological Survey’s (USGS) research program on the control of brown tree snakes is housed at the refuge. Loss of access to that facility and their nearby experimental snake barrier (Closed Population facility) would be a tremendous setback for this program, which has made great strides in understanding the complex dynamics involved in developing landscape-scale control methods of this invasive species population. Control of brown tree snakes is critical to the reintroduction of native bat and bird species to park lands on Guam.

Equally critical is the ability to control the spread of brown tree snakes from Guam to the Commonwealth of the Northern Mariana Islands, Hawaii, and other states and territories where the NPS and other agencies manage public lands for the protection and conservation of native terrestrial species.

We look forward to continued consultation with Department of Defense (DoD) under Section 106 of the National Historic Preservation Act and the development of a new or updated Programmatic Agreement to minimize or mitigate potential adverse effects to historic properties. Similarly, the NPS will continue to assist in reviews of the Joint Region Marianas Public Access Plan to ensure public access to some of the most treasured sites on Guam.

We are pleased to read that the DoD plans to continue to support the adaptive program management framework developed in the Civil-Military Coordination Council Operating Charter as a cooperative effort with other federal agencies to reduce the impacts of the military relocation to Guam’s people, utilities, and resources. Despite the many changes in the extent and schedule of the military relocation, the NPS believes that this framework would still provide many benefits in coordination of DoD activities and communications with the other federal agencies and Government of Guam.

On the following pages in tabular format are detailed NPS comments on specific areas of the Draft SEIS. If you have any questions about our comments, please contact Jim Richardson, Superintendent, War in the Pacific National Historical Park, at 671-477-7278, extension 1003.

Chapter	Section	Page	Paragraph	Comment
ES		ES-24		NPS has concerns over the indirect impact to park wildlife and potential restoration of extirpated native species caused by the preferred Alt. A cantonment development, which would remove over 1,000 acres of limestone forest habitat and cause conversion of over 1,250 acres of Overlay Refuge land for endangered species. If enough Overlay Refuge area is lost because of this and related developments, could the designation of Critical Habitat and its restrictions be triggered for imposition on Guam? This cantonment development would also impact 977 acres of fruit bat recovery habitat, 978 acres of Mariana Crow recovery habitat, 458 acres of Guam rail recovery habitat, 977 acres of Guam kingfisher recovery habitat and 661 acres of <i>Serianthes</i> fire tree recovery habitat. These endangered native species once lived in NPS habitats and could be re-introduced after invasive snake and ungulate control advances.
ES		ES-26		Preferred Alt. A cantonment development would remove culturally important natural vegetation resources and potentially create direct adverse effects to 24 historic properties and possibly 10 unevaluated structures. How has DoD attempted to avoid these adverse effects? If that is not possible, why not, and how will they be minimized?
ES		ES-29 and other pages		Is the military pursuing other options to obtain authorization for a repository for curation of archaeological collections on Guam? If not, what other plans do they have to fulfill the stipulation in PA to provide such repository?
ES		ES-31		NPS has concerns over the indirect impact to park wildlife and to potential restoration of extirpated native species caused by the preferred Alt. 5 for LFTRC development which would cause conversion of 255 acres of Overlay Refuge land for endangered species. This would also impact 196 acres of fruit bat recovery habitat, Marianas Crow recovery habitat, and Guam kingfisher recovery habitat. These endangered native species once lived in NPS habitats and are hoped to be re-introduced after invasive snake control advances.
ES		ES-31		Preferred Alt. 5 for LFTRC development would cause direct adverse effects to at least 20 historic properties. What mitigation would lessen the impacts?
ES	General			How will the 2011 Programmatic Agreement (PA) be updated to incorporate new information and/or the need for new or modified stipulations based on analysis of impacts in the Draft SEIS? Please provide a “cross-walk” table that clearly shows what elements of the 2011 PA remain relevant to

				projects covered in the 2010 EIS and this SEIS.
ES	General			How will the Joint Region Marianas Public Access Plan be updated to incorporate the 2012 Roadmap Adjustments to the military relocation on Guam?
ES	General			What is the potential to have major changes again to this proposed build-up before its implementation, for example, if the redeployments to Australia and Hawaii are not able to proceed or if Japan changes plans for US bases in-country if Japanese defense needs change?
ES	General			The Final SEIS must discuss how the proposed actions fulfill formal plans (not the "Roadmap Adjustments") for US military re-alignment in the Western Pacific and East Asia. How does the change from actions in the 2010 EIS, such as redeployment of Marines to Australia and Hawaii, fulfill such formal plans? Are EISs being drafted for impacts at those other redeployment sites?
ES	General			The Hawaii and Micronesia Biosecurity Plan which is developed because of, and with funding from, the Mariana Islands military build-up environmental impact process, must be discussed and applied throughout many areas of the Final SEIS dealing with terrestrial and marine living resources and the quality of life and economy of Guam. Although Best Management Practices (BMPs) address this in principle, the specific actions from the Hawaii and Micronesia Biosecurity Plan should be noted where appropriate in the Final SEIS. The regular transfer of Guam troops to Tinian or Rota, for example, for training, exposes those islands to invasive species. The threats of impacts on neighboring islands from Guam invasive species is an important issue to be addressed in the Final SEIS.
2		2-9	Table 2.2-4	Table 2.2-4 and associated text on page 2-9 does not explain range usage, just ammunition usage at the range. Clarify whether 39 weeks of use means seven days/week usage (including two nights), or would it be only five days per week as discussed in the 2010 FEIS? Or does it mean the equivalent of 273 days/year, using it five to six days per week all year? Complete Table 2.2-4 to include the information provided in the 2010 Final EIS, Vol 2, page 2-57, Table 2.3-2, columns 3-6 "Typical Use Estimates" and Note (a).
2	2.8	2-88	Table 2.8.1	Will herbicides or fertilizers be used for maintenance of firing ranges and how will their impacts to water quality be managed?
2	2.8	2-100	Table 2.8.1	This section has no BMPs for Cultural Resources protection. The Final SEIS should include BMPs for Cultural Resources

				protection or references to how practices will protect Cultural Resources.
2	2.8	2-102	Table 2.8.1	What approach will be used to remove vessels that unknowingly or intentionally enter SDZ during firing practice?
3	3.2.1.3			What is the “Guam Coastal Assessment program” and how does it monitor Nearshore Waters?
3		3-31	Fig. 3.6.1-1	Dandan NASA site is not shaded as Federal land.
3	3.6.1	3-35	1	The land use discussion does not address the existing Guam Zoning Law which is the legal basis of land use permission for non-federal lands on Guam, including properties that may need to be acquired by the DoD. Instead the Draft SEIS only shows Fig. 3.6.1-2 which is an interpretation of land use that does not match legal zones and Fig. 3.6.1-3, which indicates conceptual plans for land use in some northern and central parts of Guam but does not match legal land uses allowed under Guam Zoning Law. This section should be re-written in the Final SEIS.
3	3.6.1	3-35	4	“...President retains the right to establish to establish naval defensive...”
3	3.8.1.1	3-40		The NPS vegetation habitat names for Guam are applied in NPS units and some are adjacent to DoD lands and share the same vegetation types. Reference should be made to NPS Inventory and Monitoring Program Vegetation Protocols and GIS maps.
3	3.9.1	3-59	2	The reason why “...non-native species will not be discussed...” is not acceptable. The Final SEIS must address EO13112 better and include discussion on invasive marine species threats and include information from the Hawaii and Micronesia Biosecurity Plan which is developed because of, and with funding from, the military build-up environmental impact process.
3	3.9.2	3-63		Add the Marine Mammal Protection Act
3	3.9.2.3	3-67		Under Marine Conservation Areas, the Final SEIS should include discussion or a note on why Sasa Bay Marine Protected Area (MPA) on federal submerged lands is not recognized as a federal MPA, while Pati Point MPA is similarly established under Guam law and on submerged DoD land and is recognized as a federal MPA.
3	3.10	3-72		How the PA is used to satisfy Section 106 requirements should be explained.

3	3.11.2	3-77		Regulatory Framework should also mention the National Natural Landmarks Program which includes Mt. Lamlam, next to Naval Magazine.
3	3.10.3.1	3-75		Range Mitigation Plan. Is DON already contracting a Range Mitigation Plan for Northwest Field LFTRC under the PA before the Final SEIS and ROD?
3	3.10.3.2	3-76		The direct impacts under NEPA and indirect effects under NHPA are confusing terms. 36 CFR Part 800 requirements must be met for NHPA conformity and could be summarized here.
3	3.13.3.2	3-93		The impact of the SDZ at Ritidian and Pagat on shipping lanes should be discussed in the Final SEIS.
3	3.17.1.1	3-109	5	Explosives Safety. Besides saying "...UXO and DMM may also be present in waters off the assault beaches..." The Final SEIS should note that an estimated 64 tons of WW II UXO and DMM that was dumped by the DON sits on coral reefs at SCUBA diving depths at Asan Bay in War in the Pacific NHP waters. Results of NPS toxicity studies on these munitions should be available in FY2014 and may be reported in the Final SEIS.
4	4.1.2.2	4-13		Is the Navy's digitized automatic clearing and grading permit filing system with Guam Environmental Protection Agency operating and in use for construction projects on federal land?
4	Nearshore Waters	4-15	1	The NPS would like to see a model of the potential impacts from lighting at the proposed Finegayan housing component on night sky values along the west side of Guam and especially at Asan Beach and Asan Bay Overlook.
4	4.6	4-388	Table 4.6-1	Will the DoD Economic Adjustment Committee develop the implementation plan for support of non-DoD infrastructure on Guam before the Final SEIS and ROD?
4	4.1.7	4-37	1	The Final SEIS should note here the impacts as related to the JRM Access Plan being finalized in 2014 under the PA.
4	4.1.8	4-446	Fig. 4.1.8-5	Black line of DoD boundary is separating Northwest Field from Anderson AFB, but this is all DoD property.
4	4.1.8			Cantonment Alt. A would remove 1018 acres of secondary limestone forest and 1.8 acres of primary limestone forest. These losses of habitat for fruitbats, Mariana crow, Guam kingfisher and <i>Serianthes</i> are said in the Draft SEIS to be mitigable impacts to species recovery. These limestone forests of Guam are the largest and most important habitat areas for recovery of these species. Populations of fruitbats, crows and <i>Serianthes</i> on other islands have very limited and threatened suitable habitat. The larger habitat areas on Guam

				will be critical to species survival when snake control is implemented. They must be preserved now, even while the species are currently absent.
4	4.1.8.1.2	4-54	2	The status of the Orote Ecological Reserve Area (ERA) expansion proposal, to be approved in 2014, should be noted in the Final SEIS.
4	4.1.9	4-69	Next to last	sp. “Pugua Patch Reef”
4		4-70	Fig.4.1.9-1	sp. “Pugua Patch Reef”
4	4.1.9	4-72	1	Haputo ERA is said to have 154 coral species and 163 scleractinian coral species. Explain what number is correct.
4	4.1.9	4-73	Table 4.1.9-1	sp.: <i>Montiporacaliculata</i> and <i>Montiporalobulata</i> .
4	4.1.10	4-87	Table 4.1.10-7	sp.: Andersen softball field
4	4.1.10			A number of possible NRHP eligible structures to be impacted have not been evaluated. Why won't this be done for the Final SEIS?
4		4-214	Fig.4.2.9-1	sp.: Pugua Patch reef
5	5.0	5-1	Last	Why are alternative sites to the Hand Grenade range at Andersen South not considered?
5	5.3.1.1	5-163		Final SEIS should mention that the U.S. National Natural Landmarks Program includes Mt. Lamlam, which is next to Naval Magazine.
5	5.3.11.2	5-218		The U.S. National Natural Landmarks Program includes Mt. Lamlam, Guam's highest peak, which would lose viewscape values due to LFTRC Alt. 3 development and use.
5	5.5	5-304		Isn't this LFTRC site next to, but not at, Northwest Field?
5	5.5			Are impacts to the US Coast Guard navigation facility, the private telecommunications repeater station and Anderson AFB Milky Way facility on the Ritidian cliff line discussed?
5	5.2.4, 5.3.4, 5.4.4, and 5.5.4			Noise zone impacts at LFTRC's are said not to be incompatible with land use because of lack of occupied houses in the zones. But other activities such as hiking, picnicking, visitor's organized tours and appreciation of excellent beaches and historic sites would be negatively impacted by LFTRC noises. The Final SEIS must note this. This is especially damaging to the tourism business at private Jinapsan Beach lands. The USGS geologist most knowledgeable on Pacific Island beaches, Dr. David Doan, has described these beaches accessible through Anderson AFB as the best beaches in the Pacific Islands.

5	5.5.6	5-326	4	Although refuge administrative facilities, visitor center and access roads would be relocated under implied negotiations between the Departments of Interior and Navy on use of the Alt. 5 LFTRC, the endangered fire tree <i>Serianthes</i> , habitats supporting endangered species, culturally important natural resources and cultural and archeological sites cannot be relocated. Their use for recreation, education and support of native species will be negatively impacted.
5	5.5.9.3			NPS resources include foraging areas in Agat and Asan Bays for the endangered sea turtles which are dependent on the Ritidian beaches as a major nesting habitat. Access to most important areas of endangered sea turtle nesting at Ritidian will be restricted by the SDZ preventing any technicians or biologists, whether refuge or DoD ordnance trained staff, from monitoring and protecting nesting females and hatchlings on most days of the year. How can this refuge function be continued with LFTRC use?
5		5-326 to 5-371		The marine transportation/recreation use of the sea areas within the SDZ of Alt.5 LFTRC would be critically impacted by implementation of this proposed LFTRC. Intentional and unintentional use of these waters in the SDZ for their support of excellent diving, fishing and even canoeing, including the Guam Northern Passage canoe event, would present conflict with the firing range use. How will customary users be kept out of these waters?
5	5.5.9	5-358		NPS resources of threatened green sea turtles, <i>Cheloniemydas</i> are expected to be negatively impacted by the impacts of Alt. 5 LFTRC on the major nesting area of this species on Guam. Also the SDZ interference with access to these beaches by refuge biologists managing and monitoring the turtle resources will harm turtle conservation. How can turtle monitoring continue under a SDZ?
5	5.5.10	5-361		Although the Draft SEIS indicates that the purpose of the refuge is for the protection of wildlife and living organisms, the NPS shares responsibilities in protecting cultural, archeological and historical sites and features. Some uniquely significant features and traditional cultural properties are found in the areas to be impacted by LFTRC Alt. 5. These include the oldest known settlement site in the Marianas and ancient rock pictographs including ones with star or traditional constellation formations. How will DoD avoid impacting the monitoring, study and educational use of these sites within the SDZ?
5			Table	At least 20 NRHP eligible sites are known in the Alt. 5

			5.5.10-1	LFTRC direct impact area. How will DoD avoid restricting access for the public and/or educational, scientific, and traditional use activities?
5		5-366	Table 5.5.10-2	At least 49 NRHP eligible sites are known in the Alt. 5 LFTRC indirect impact area. How will DoD avoid restricting access for the public and/or educational, scientific, and traditional use activities?
5	5.2	5-95		For LFTRC Alternatives 2 to 4, especially Alt. 3, the risk of wildfire could increase and fires could spread from Naval Magazine into remote areas of the national park at Mt. Alifan. This could lead to loss of vegetation, soil and native animals and would expose ground artifacts to looters or illegal collectors because of the loss of vegetation cover.
5	5.2.8 and 5.2.9			Issues and actions included in the Hawaii and Micronesia Biosecurity Plan need to be discussed in the Final SEIS under terrestrial and marine resources areas.
7	General			This Draft SEIS does not address the transient aircraft carrier berthing in Apra Harbor or the Army Air and Missile Defense Task Force (AAMDTF) deployment that were addressed in the 2010 Final EIS. Those projects may be independent of the SEIS proposed action, but if implemented these will greatly increase the cumulative effects of the military build-up on Guam. Likewise proposed developments for Marines training on Tinian and Pagan could have an impact on related support facilities and actions on Guam and these should be estimated and addressed in the Final SEIS under cumulative impacts.
8		8-1		The statement “I Tanota was not adopted” is incorrect. That Guam Land Use and Zoning Law was adopted as a local law in 1999. It was to come into full effect in one year but it was not supported by its needed implementation budget and was only implemented for about two months. It then was suspended when revisions were called for by the Guam Legislature. Those revisions were never adopted and Guam has reverted to the land use laws and zoning of 1966.
8	8.3	8-2		Native American Graves Protection and Repatriation Act (NAGPRA) does not apply to Guam.
9	9.5.9	9-15		Marine Resources. The last two references are lumped together as one. They should be split into SWCA 2010 and Williams, I., et al. 2012

U.S. Geological Survey

For the last decade, USGS has conducted extensive brown treesnake research in the Closed Population facility at Northwest Field on Andersen AFB. For over 20 years, the USGS has been conducting research and methods development studies aimed at increasing the efficacy of brown treesnake control on Guam. Many of the snake control tools currently in use on Guam came about as a result of USGS research. The current facility was built in 2004 using approximately \$900,000 in DOI funding, and on average USGS spends \$450,000 per year on research activities in the facility.

The maps depicting firing points and surface danger arcs for the firing range on NW Field depict the Closed Population Facility as being outside of the active firing area. However, DOD representatives have stated that access to the facility cannot be guaranteed when the firing range is active. USGS requires 24 hour/7 days per week access to the Closed Population facility. **If access cannot be guaranteed because of new DOD activities or new security measures in the adjacent firing range, then the facility will need to be placed elsewhere on Guam at a location with long-term guaranteed access.**

Thank you for the opportunity to review and comment on the DEIS. If you have any questions concerning our comments, please contact Gary Patterson, USGS Coordinator for Environmental Document Reviews, at (303) 236-1476 or at glpatter@usgs.gov

Office of Insular Affairs

While OIA acknowledges that there will be a reduction in the force posture as outlined in the 2012 Roadmap Adjustment, we maintain that the proposed action on Guam will significantly impact Guam's population, civilian infrastructure, cultural and historical resources, as well as wildlife. We also recognize the importance of the CNMI Joint Military Training (CJMT) Environmental Impact Statement (EIS) advancing, identifying proposed actions and their respective impacts, and providing public input on not just environmental, though socio-economic impacts on the CNMI.

Continued leadership by the Department of Defense (DoD) and meaningful collaboration and coordination with federal interagency and Governments of the CNMI and Guam help ensure the needs of the CNMI and Guam, as well as DoD requirements for the military relocation are met. OIA looks forward to continuing to serve as a cooperating agency contributing expertise and perspectives as both the Guam SEIS and CJMT EIS move forward.

Civilian Infrastructure and Socio-economic Needs

- Despite the 2012 Roadmap Adjustment, OIA expects that the proposed military relocation to Guam and the CNMI will have a significant impact on civilian infrastructure and population, representing an increased need for housing, power, roads, water, wastewater treatment, health, public safety and educational facilities. Given the additional demands on physical infrastructure, it is unclear how upgrades and development of new infrastructure will be financed in light of the limited ability of the Government of Guam (GovGuam) to fund necessary infrastructure related to this SEIS and the extent costs will be passed onto civilians paying increased rates. Beyond the cost

of bolstered infrastructure, the increased use of infrastructure results in cumulative socio-economic impacts on Guam and CNMI civilian communities.

The draft SEIS details that the Economic Adjustment Committee will convene and has a Congressional mandate to identify additional assistance to support public infrastructure requirements and an implementation plan to support the preferred alternative no later than to the issuance of the Record of Decision (ROD), its appropriate for updates relative to those efforts be included in the Final SEIS. Given existing operational and capacity challenges of GovGuam health, education, public safety, and social services coupled with the increase demand resulting from the buildup, we are hopeful that the EAC implementation plan will identify how assistance can be provided to prepare adequately the Guam civilian infrastructure and existing workforce to absorb the increased utilization and population increase associated with the buildup. Also, identifying technical assistance and support of existing or new community planning and coordination efforts that DoD will pursue should be included in its implementation plan. OIA looks forward to participating as a representative of the Department of the Interior as the EAC convenes and works to meet its Congressional mandate.

Adaptive Program Management (APM)

- In the 2010 Record of Decision, Department of Navy (DON) advanced APM as the mitigation measure to avoid and/or reduce negative impacts resulting from the proposed actions. Further, the Civil Military Coordination Council (CMCC) is the entity which was created by DON to implement APM and serve as a representative body for local and federal agencies. While the draft SEIS (2.9 Potential Mitigation Measure) states that APM is “no longer required”, OIA maintains that the CMCC will continue to be integral for successful intergovernmental and interagency coordination. While the force posture has been decreased the cumulative effects of individual projects necessary for the buildup may very well require DoD implementing APM.

Access to Historical and Cultural Sites

- The public has raised concern about the loss of and lack of access to historic and cultural sites on Guam and Tinian due to the proposed alternatives. Currently, there are no Best Management Practices (BMPs) in Table 2.8-1 for Cultural Resource protection. Given the direct and potential indirect effects and cumulative impacts on cultural resources, it is appropriate that BMPs be included in the SEIS and added to Table 2.8-1. OIA recognizes the value and importance of preservation, management, and access of such sites to Guam and Tinian communities who continue to exercise and practice cultural activities and traditions. Proactive and regular communication by DoD on the impacts of alternatives on historical and cultural sites, as well as land acquisition with stakeholders and the public, especially in affected communities is critical as work associated with the SEIS continues.

Programmatic Agreement

- The draft SEIS (Section 3.10.2 Regulatory Framework) discusses the 2011 Programmatic Agreement (PA) which would streamline the review process for compliance with section 106 of the National Historic Preservation Act and specify mitigation measures. OIA reiterates the importance of DoD’s commitments contained in that agreement, including

DoD's commitment to seek Congressional authorizations and appropriations to support the construction of a Guam Cultural Repository, as well as a CNMI permanent curation facility on Saipan, and cultural and interpretive center on Tinian. The Repository is critical in providing for curation of archaeological properties on Guam and serve as a source of information on Guam history and culture.

As the 2011 PA contains project or area specific mitigation for both Guam and Tinian, language should be included in the Guam SEIS and CJMT EIS to explain which provisions of the PA are maintained and the process of how the PA will be modified and updated relative to the impacts of the respective preferred alternatives. In the 2011 PA, DoD expressed its commitment to providing 24-hour- a- day/seven- day- a- week unimpeded access to Pagat Village and Pagat Caves to avoid, minimize and mitigate impacts on historic properties, how will the same commitment for cultural and historical sites be maintained given the preferred alternative for the Live Fire Training Range Complex (LFTRC)? Further, clarification on how cultural resources of the CNMI will be impacted, as well as when, and under what conditions, and which provisions of the 2011 PA will be implemented as it relates to CNMI proposed activities should be included in the CJMT EIS.

Guam National Wildlife Refuge

- The LFTRC alternative proposed in the draft SEIS would significantly and irreversibly affect the mission, operations, and public use of the Guam National Wildlife Refuge (Refuge). As written, the preferred alternative would not be legal.

The National Wildlife Refuge System Administration Act (16 U.S.C 668dd-ee), under which the Refuge is administered, requires all uses of a refuge to be found to be compatible with the purposes of the refuge and the System mission, and consistent with public safety. The decisions related to compatibility and safety are vested with the U.S. Fish and Wildlife Service (FWS) and may not be delegated. Further, implementing regulations (50 CFR 26.41 (b)) prohibit the type of compensatory mitigation proposed in the SEIS - such actions could not make an otherwise not-compatible use to be found compatible. Given these significant potential legal issues, we strongly recommend that further and thorough discussion continue with the Department of Defense and the Department of the Interior's Fish and Wildlife Service, Office of Insular Affairs, and Office of the Solicitor.

Brown Tree Snake Interdiction

- OIA currently funds 100% of the civilian interdiction efforts on Guam as well as critical research, native species restoration, and public awareness activities. Through OIA's BTS Control program OIA has provided significant financial assistance and grant management, an amount of \$30.92 M in the last decade including \$2.99 M in FY2013. OIA has worked cooperatively with the FWS which has provided overall program coordination for BTS control and the Guam National Wildlife Refuge (Refuge) has constructed a multi-species barrier which could be used to assist in the control of BTS at this property. OIA is concerned how the preferred alternatives would impede the purpose of the multi-species barrier to control BTS at the Refuge.

The Department of Navy's commitment to support BTS interdiction requirements resulting from increases in civilian sector shipping/transport detailed in the 2010 FEIS remains critical to DOI. We commend the DON for committing in the draft SEIS to fund and support BTS interdiction in Guam, CNMI, and Hawaii resulting from increased direct, indirect, and induced growth caused by the Marine Corps relocation to Guam. DOI agencies have supported civilian sector BTS interdiction efforts since the early 1990s.

Brown Treesnake (BTS) Control, Mitigation, and Research

- BTS impacts include biosecurity, endangered species, power distribution, human health and economies. Eradicating snakes from Guam and preventing establishment elsewhere has been a long-term goal of a range of Federal, state, and territorial agencies. While the SEIS makes multiple references to the Joint Region Mariana BTS Interdiction Program, specific avoidance, minimization and mitigation actions the DoD will take to support and facilitate research and island-wide BTS control efforts both on and off DoD lands should be included in the SEIS. OIA acknowledges in the draft SEIS that DON will fund research/design projects identified as priorities by the BTS Technical Working Group Strategic Plan for a period, up to 10 years from the start of the cantonment construction as a potential mitigation measure and encourages that such action be included as a final mitigation measure.

In order to address the threat of the BTS spreading from Guam to other areas, BTS control and interdiction infrastructure, trained personnel, and resources are needed not just in Guam, but also in locations outside of Guam where materials or personnel are transiting. Such action would be consistent with DoN's SEIS commitment to ensure that military activities, including transport of civilian and military personnel and equipment to and from Guam do not contribute to the spread of brown treesnakes to other island or regions. Coordination with active DoD leadership and participation will be vital to mitigate the spread of BTS. In addition to interdiction efforts, DoD prioritization and support of research that will aid in locating incipient populations of snakes and demonstrating landscape control is needed. The draft SEIS should specify how DoD will coordinate and support BTS control and mitigation in Guam and with partners in other locations that may not have adequate infrastructure or personnel for BTS, Control, mitigation, and research.

Micronesian Biosecurity Plan (MBP)

- The MBP is described as the tool that will address invasive species control and prevention during and after the military relocation in the 2010 ROD. The MBP represents a significant effort of partnership across U.S. agencies (including DoD and DOI) working in close collaboration with a variety of local and regional invasive species experts. The SEIS must include adequate discussions of how the MBP will prevent, detect, mitigate and manage invasive species. As the MBP is not yet completed, the SEIS should include: a realistic timeline for completion of the MBP and implementation of the MBP, as well as identification of interim measures for invasive species. In addition, the SEIS should provide a framework that ensures Federal, state, and territorial cooperation and oversight of MBP implementation.

Training on Tinian

- The draft SEIS (Section 1.2 Scope of this SEIS) notes that the 2010 decisions regarding training ranges on Tinian remains final and are not subject to reanalysis in the SEIS, though the Department of Navy has deferred implementation of the Tinian training ranges from the 2010 ROD pending the outcome of the on-going CNMI Joint Military Training EIS (CJMT EIS). Will the EAC be responsible for addressing necessary infrastructure, roads, and facilities accounted for in the on-going CJMT EIS in a manner similar to Guam?

Please contact Kristen Oleyte, at 808.477.7642 or Kristen_H_Oleyte@ios.doi.gov, if you have any questions.

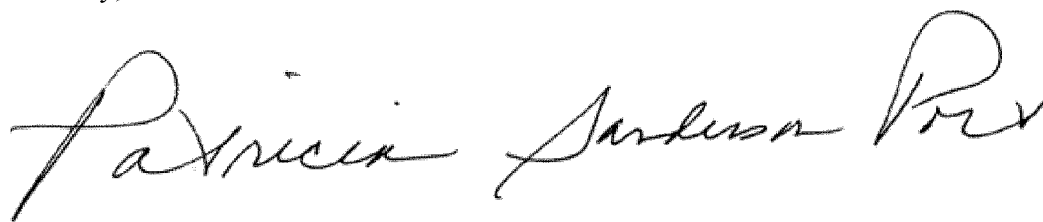
Additional comments are provided on specific sections of the draft SEIS below:

Chapter	Section	Page	Comment
2	2.2.3	2-8	As range utilization depends on the number of personnel required to complete annual individual training events; what percentage of UDP and PCS personnel are expected to use the LFTRC to complete their annual training events? Is it expected that all of the UDP will use the LFTRC for their annual training events, or would they have addressed those annual requirements at other locations outside of Guam before they serve their 3- month rotation in Guam? Inquiry made to understand better the impact on use of training ranges and non-availability of ranges. Inclusion of such information may be beneficial to include in Final SEIS to provide greater transparency on range utilization.
2	2.5.2.6	2-57	While Initial Screening Criterion section notes that the SDZs would overlies 142 acres of the Ritidian Unit of the Guam NWR, it should include the total acreage of NWR and impact on Guam NWR.
2	2.5.2.6	2-58	While the conclusion notes that land acquisition is not required. Should clarify that FWS managed land are included in the SDZ and would that land would be impacted by range use.
2	Table 2.8-1	2-83	Recommend inclusion in the table of relevant BMPs that the Civil Military Coordination Council (CMCC) and Council Working Groups (CWG) developed measures/thresholds to avoid or reduce adverse impacts on environment and social services associated with construction activities resulting from the military realignment
2	Table 2.8-1	2-94	How will the JRM BTS comprehensive brown tree snake interdiction program address increased staff requirements for

			ports outside of Guam where materials and personnel will be transiting or originating from to?
2	Table 2.8-1	2-101	No BMPs are included under the Cultural Resource Protection section. This is concerning as there is acknowledgment that cultural resources will be impacted by proposed activities. BMPs should be included in Final SEIS and description of how such practices will protect, reduce, and mitigate impacts to cultural resources. Cultural Resource Mitigation measures were included in the “Final Mitigation Monitoring and tracking program plan for Guam and CNMI Military Relocation Program” NAVFAC Document and 2011 Programmatic Agreement, which may provide as a useful reference in developing Cultural Resource BMPs for inclusion in Final SEIS.
2	2.9	2-85	Does the Council on Environmental Quality (CEQ) concur with DON assertion that “Adaptive Program Management is no longer required”?
3	3.15.3.1	3-100 to 3-101	While the IMPLAN model acknowledges the positive effect on Guam’s economy of being stimulated by Guam generated economic activity, how does the model account for the cost born by GovGuam to improve infrastructure and address increased staffing requirements for local government services and programs?
4	4.1.10	4-79	Reference to augmentation of SEIS by reviews consistent with the 2011 PA. Can clarification in this section be provided about what elements of the PA are maintained and how updates to the PA will be incorporated based on the impacts of the draft SEIS? Creating a table in the Final SEIS could provide such clarity on what elements of the 2011 PA are maintained or require augmentation.
4	4.1.10.2	4-88	SEIS states that “To the degree possible, impacts to historic properties and other resources of cultural importance would be avoided or minimized during the planning process.” Appropriate to elaborate what specific actions will be taken to address and avoid adverse effects.
4	4.1.15	4-118	Temporary Workforce Housing is described, in order to provide appropriate context, suggest additional language be included in this section or referencing table 4.1.15-6, noting the population of off-island construction workers and their expected temporary Workforce Housing needs required for the buildup.

4	4.1.15	4-119, 4-134	Gross Island Product is described in this section, though the DOI Office of Insular Affairs in partnership with the DOC Bureau of Economic Analysis established Guam Gross Domestic Product Estimates. The initial estimates cover 2002-2010, and in 2013 BEA released GDP estimates for 2011 and 2012. May seek to include or reference appropriate data in this section, seehttp://www.bea.gov/national/gdp_territory.htm
4	4.1.15	4-122	Agencies Affected by Development outlines Guam Agencies with permitting/monitoring duties; additional consultation with the Government of Guam may assist in identifying additional agencies that without appropriate staffing could result in delay of buildup. Agencies like Guam Department of Parks should be considered given expected impacts discussed on 4-7137 and agency's role in regulation to address conflict of ocean-based tourism. Similar consideration should be given to the Guam Department of Revenue and Taxation as it is responsible for tax enforcement, issuance of driver's licenses, vehicle registration, and business licenses.
5	5.5	5-304	We are informed that a legal impediment exists for Alternative 5 and strongly recommend discussions continue between Department of Defense and the Department of the Interior's Fish and Wildlife Service and Office of the Solicitor.

Sincerely,



Patricia Sanderson Port
Regional Environmental Officer

cc:

Director, OEPC

Loretta B. Sutton, OEPC Staff Contact

Miel Corbett, FWS Pacific Region

Earl Campbell, FWS Assistant Field Supervisor, Pacific Islands

Jim Richardson, NPS Superintendent, War in the Pacific National Historical Park

Gary Patterson, USGS Coordinator for Environmental Document Reviews

Kristen Oleyte, OIA Senior Policy Advisor